Amendments to the claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1-47. (previously canceled)

48. (currently amended) A chimeric protein comprising a *Spiroplasma* DNA methyltransferase (*M.SssI* DNAmt) and a LexA DNA-binding protein, wherein the LexA DNA-binding protein binds to a region of DNA ("LexA binding region"), and wherein the *M.SssI* DNAmt specifically methylates CpG sites adjacent to the LexA ~~DNA~~ binding region ~~of LexA~~.

49. (currently amended) A vector comprising cDNA encoding a chimeric protein comprising a *Spiroplasma* DNA methyltransferase (*M.SssI* DNAmt) and a LexA DNA-binding protein, wherein the LexA DNA-binding protein binds to a region of DNA ("LexA binding region"), and wherein the *M.SssI* DNAmt specifically methylates CpG sites adjacent to the LexA ~~DNA~~ binding region ~~of LexA~~.

50. (currently amended) The vector of claim 49, further comprising a LexA binding region ~~site~~ and at least one CpG site adjacent to the LexA binding region ~~site~~.

51. (currently amended) The vector of claim 50, wherein the CpG site is approximately 25 nucleotides from the LexA binding region ~~DNA site~~.

52. (currently amended) A chimeric protein comprising a LacI protein and a Spiroplasma DNA methyltransferase (*M.SssI* DNAmt), wherein the *M.SssI* DNAmt specifically methylates CpG sites adjacent to a ~~the~~ Lac operator sequence.

53. (currently amended) A vector comprising cDNA encoding a chimeric protein comprising a LacI protein and a Spiroplasma DNA methyltransferase (*M.SssI* DNAmt), wherein the *M.SssI* DNAmt specifically methylates CpG sites adjacent to a ~~the~~ Lac operator sequence.

54. (previously presented) The vector of claim 53, further comprising a Lac operator sequence and at least one CpG site adjacent to the Lac operator sequence.

55. (previously presented) The vector of claim 53, wherein the CpG site is approximately 25 nucleotides from the Lac operator sequence.

56. (previously presented) A cell comprising the vector of claim 49 or 53.